

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
4 January 2001 (04.01.2001)

PCT

(10) International Publication Number
WO 01/00805 A2

- (51) International Patent Classification⁷: C12N 15/00 199 41 379.7 31 August 1999 (31.08.1999) DE
199 41 395.9 31 August 1999 (31.08.1999) DE
(21) International Application Number: PCT/IB00/00926 199 42 077.7 3 September 1999 (03.09.1999) DE
199 42 078.5 3 September 1999 (03.09.1999) DE
(22) International Filing Date: 23 June 2000 (23.06.2000) 199 42 079.3 3 September 1999 (03.09.1999) DE
199 42 088.2 3 September 1999 (03.09.1999) DE
- (25) Filing Language: English (71) Applicant: BASF AKTIENGESELLSCHAFT
[DE/DE]; D-67056 Ludwigshafen (DE).
- (26) Publication Language: English (72) Inventors: POMPEJUS, Markus; Wenjenstrasse 21,
D-67251 Freinsheim (DE). KRÖGER, Burkhard; Im
Waldhof 1, D-67117 Limburgerhof (DE). SCHRÖDER,
Hartwig; Goethestrasse 5, D-69226 Nussloch (DE).
ZELDER, Oskar; Rossmarktstrasse 27, D-67346 Speyer
(DE). HABERHAUER, Gregor; Moselstrasse 42,
D-67117 Limburgerhof (DE).
- (30) Priority Data:
- | | | |
|--------------|-----------------------------|----|
| 60/141,031 | 25 June 1999 (25.06.1999) | US |
| 199 31 454.3 | 8 July 1999 (08.07.1999) | DE |
| 199 31 478.0 | 8 July 1999 (08.07.1999) | DE |
| 199 31 563.9 | 8 July 1999 (08.07.1999) | DE |
| 199 32 122.1 | 9 July 1999 (09.07.1999) | DE |
| 199 32 124.8 | 9 July 1999 (09.07.1999) | DE |
| 199 32 125.6 | 9 July 1999 (09.07.1999) | DE |
| 199 32 128.0 | 9 July 1999 (09.07.1999) | DE |
| 199 32 180.9 | 9 July 1999 (09.07.1999) | DE |
| 199 32 182.5 | 9 July 1999 (09.07.1999) | DE |
| 199 32 190.6 | 9 July 1999 (09.07.1999) | DE |
| 199 32 191.4 | 9 July 1999 (09.07.1999) | DE |
| 199 32 209.0 | 9 July 1999 (09.07.1999) | DE |
| 199 32 212.0 | 9 July 1999 (09.07.1999) | DE |
| 199 32 227.9 | 9 July 1999 (09.07.1999) | DE |
| 199 32 228.7 | 9 July 1999 (09.07.1999) | DE |
| 199 32 229.5 | 9 July 1999 (09.07.1999) | DE |
| 199 32 230.9 | 9 July 1999 (09.07.1999) | DE |
| 199 32 927.3 | 14 July 1999 (14.07.1999) | DE |
| 199 33 005.0 | 14 July 1999 (14.07.1999) | DE |
| 199 33 006.9 | 14 July 1999 (14.07.1999) | DE |
| 199 40 764.9 | 27 August 1999 (27.08.1999) | DE |
| 199 40 765.7 | 27 August 1999 (27.08.1999) | DE |
| 199 40 766.5 | 27 August 1999 (27.08.1999) | DE |
| 199 40 830.0 | 27 August 1999 (27.08.1999) | DE |
| 199 40 831.9 | 27 August 1999 (27.08.1999) | DE |
| 199 40 832.7 | 27 August 1999 (27.08.1999) | DE |
| 199 40 833.5 | 27 August 1999 (27.08.1999) | DE |
| 199 41 378.9 | 31 August 1999 (31.08.1999) | DE |
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
— Without international search report and to be republished upon receipt of that report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING PROTEINS INVOLVED IN MEMBRANE SYNTHESIS AND MEMBRANE TRANSPORT

(57) Abstract: Isolated nucleic acid molecules, designated MCT nucleic acid molecules, which encode novel MCT proteins from *Corynebacterium glutamicum* are described. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing MCT nucleic acid molecules, and host cells into which the expression vectors have been introduced. The invention still further provides isolated MCT proteins, mutated MCT proteins, fusion proteins, antigenic peptides and methods for the improvement of production of a desired compound from *C. glutamicum* based on genetic engineering of MCT genes in this organism.

